



Department of Energy
Carlsbad Field Office
P. O. Box 3090
Carlsbad, New Mexico 88221

JUL 23 2004



Mr. Ron Curry, Secretary
New Mexico Environment Department
1190 St. Francis Dr., Suite N4050
P. O. Box 26110
Santa Fe, NM 87502

Subject: Notification of Noncompliance Regarding Waste Containers Disposed at the Waste Isolation Pilot Plant from the Advanced Mixed Waste Treatment Project

Dear Secretary Curry:

This letter describes the Department of Energy's (DOE) plans to provide the New Mexico Environment Department (NMED) with information regarding the noncompliance of certain waste containers from the Advanced Mixed Waste Treatment Project (AMWTP) that have been disposed of at the Waste Isolation Pilot Plant (WIPP). The Permittees do not believe that this situation is a violation that could endanger human health or the environment. This letter is DOE's written notice of noncompliance as required by Section I.E.13.c of the WIPP Hazardous Waste Facility Permit (HWFP).

Background

On July 14, 2004, the Carlsbad Field Office (CBFO) telephoned the (NMED) concerning waste containers that had been disposed of at WIPP from AMWTP waste streams BNINW216 and BNINW218. These are homogeneous solid waste streams from Summary Category Group S3000.

Description of the Noncompliance and Its Cause

BNFL characterized and WIPP has disposed of containers from waste streams BNINW216 and BNINW218 that were not subject to random sampling as required by Sections B-1a, B-3a(2), and B2-2a of the HWFP. The cause of this noncompliance appears to be that BNFL assumed that all of the containers from these waste streams that were in aboveground storage at the Idaho National Engineering and Environmental Laboratory (INEEL) were parts of the lots of these waste streams that had been subject to random sampling by the previous INEEL contractor. DOE's investigation of this noncompliance has shown that this assumption was incorrect. A final cause of this noncompliance will be determined as a result of the corrective action process described below.



On July 15, 2004, CBFO personnel traveled to Idaho to begin the investigation into the extent of the noncompliance and its cause. As a result of this preliminary investigation, CBFO has determined that the BNFL has sent a number of waste containers to the WIPP that were not subject to random sampling as required by the HWFP. CBFO is continuing to review available documents to verify the specific noncompliant containers.

Shipment IN040029 was received at WIPP and was placed under controls to prevent its emplacement in the repository. Enclosure 1 lists the containers in this shipment.

The Period of the Noncompliance Including Exact Dates and Times and, if the Noncompliance has Not Been Corrected, the Anticipated Time it is Expected to Continue

Shipments to WIPP from INEEL were suspended on July 14, 2004 and will not resume until corrective actions are complete. DOE's investigation into the period of noncompliance is continuing, and it is evaluating options for correcting the noncompliance.

Steps Taken or Planned to Reduce, Eliminate, and Prevent Recurrence of the Noncompliance

On July 19, 2004, the Carlsbad Field Office (CBFO) issued Corrective Action Report (CAR) 04-033 to BNFL. The CAR was transmitted to NMED on the day of its issuance. A copy of this CAR is enclosed with this letter. In this CAR, the details of the noncompliance were described and CBFO issued a work suspension to BNFL. Under the terms of this work suspension, BNFL is not allowed to ship waste to WIPP from waste streams BNINW216 and BNINW218, nor may it enter data into the WIPP Waste Information System (WWIS) for these waste streams. At this time, all waste shipments from INEEL are suspended until corrective actions are complete.

Although the details of the final corrective actions will be determined according to the Permit's formal corrective action process as described in Section B3-13, the DOE will require the following corrective actions by BNFL:

- Container identification for all waste streams and waste stream lots under the control of BNFL will be placed under formal configuration control
- Documented traceability of each container to its waste stream and/or waste stream lot will be required
- Containers that were not available for random sampling will be physically or administratively segregated to prevent shipment of these containers to WIPP
- A final root cause will be identified and actions to preclude recurrence will be implemented

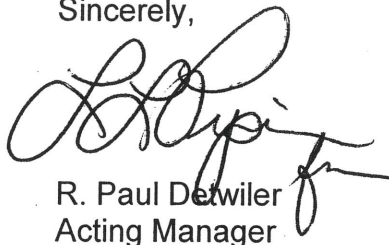
Ron Curry

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The DOE will keep the NMED fully informed as these corrective actions progress. The NMED will be invited to observe any field activities performed by the DOE in verifying the completion of corrective actions.

Please contact the CBFO Quality Assurance Manager, Ava L. Holland, at (505) 234-7423 or me at (505) 234-7300 should you have any questions concerning this notification.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Paul Detwiler".

R. Paul Detwiler
Acting Manager

Enclosure

cc w/enclosure:

J. Bearzi, NMED

S. Zappe, NMED

K. Watson, CBFO

A. Holland, CBFO

M. Navarrete, CBFO

D. Miehl, CBFO

R. Knerr, CBFO

J. Kielling, NMED

S. Warren, WTS

WIPP Operating Record, MS 486-06

CBFO QA File

WIPP Waste Information System
Shipment Summary Report

Report	RP0390
Version	1.7
Instance	PRD01
Run by	CRUICKH
Report Date	07/23/2004 11:26
Total Pages	3

Selection Criteria -

Shipment Number: IN040029

Shipment Summary Report

WIPP Waste
Information System

Waste Isolation Pilot Plant

Shipment Number: **IN040029** Manifest Number: **55061** Certification Date: **07/10/2004** Shipment Date: **07/13/2004** Receipt Date: **07/13/2004**

Shipper Site: **BN - AMWTP @ INEEL** Tractor ID: **T-63** Trailer ID: **T-302** Status: **Received**

Limited Due to: Weight: ☒ FGE: ☐ Gas Gen: ☐ Other: ☐ Transporter Name: **TRI-STATE**

Comments:

Package Number: **141** Package/ICV Closure Date: **07/10/2004** DOT Description: **Radioactive Material, N.O.S, 7, UN2982**

Dose Rate 1m: **.15** 2m: **.15** Surface: **.15**

Assembly	Container Number	Total Dose Rate (mR/hr)	Hazardous Codes	Radionuclides	Total Activity (TBq)	PE Curies	Weight (kg)
BN040053	BN10008789	.55	D006 D007 D008 D009 D010 D011 D032 F001 F002 F005 F006 F007 F009	*AM-241 CS-137 NP-237 PU-238 PU-239 PU-240 PU-241 PU-242 SR-90 U-234 U-235 U-238*/ U-233	2.847E-02	2.895E-01	2,843.25
Assembly:				*AM-241 CS-137 NP-237 PU-238 PU-239 PU-240 PU-241 PU-242 SR-90 U-234 U-235 U-238*/ U-233	2.847E-02	2.895E-01	2,843.25
Package :				*AM-241 CS-137 NP-237 PU-238 PU-239 PU-240 PU-241 PU-242 SR-90 U-234 U-235 U-238*/ U-233	2.847E-02	2.895E-01	2843.25

Shipment Summary Report

WIPP Waste
Information System

Waste Isolation Pilot Plant

Page 3 of 3

Package Number: 162 Package/ICV Closure Date: 07/10/2004 DOT Description: Radioactive Material, N.O.S, 7, UN2982

Dose Rate 1m: .15 2m: .15 Surface: .15

Assembly	Container Number	Total Dose Rate (mR/hr)	Hazardous Codes	Radionuclides	Total Activity (TBq)	PE Curies	Weight (kg)
BN040042	BN10020916	1.2	D006 D007 D008 D009 D010 D011 D032 F001 F002 F005 F006 F007 F009	*AM-241 CS-137 NP-237 PU-238 PU-239 PU-240 PU-241 PU-242 SR-90 U-234 U-235 U-238*/ U-233	5.960E-02	6.695E-01	2,874.25
Assembly:				*AM-241 CS-137 NP-237 PU-238 PU-239 PU-240 PU-241 PU-242 SR-90 U-234 U-235 U-238*/ U-233	5.960E-02	6.695E-01	2,874.25
Package :				*AM-241 CS-137 NP-237 PU-238 PU-239 PU-240 PU-241 PU-242 SR-90 U-234 U-235 U-238*/ U-233	5.960E-02	6.695E-01	2874.25
Shipment :				*AM-241 CS-137 NP-237 PU-238 PU-239 PU-240 PU-241 PU-242 SR-90 U-234 U-235 U-238*/ U-233	8.807E-02	9.589E-01	5,717.50

WSPFs: BNINW218

WIPP Waste Information System

Waste Container Data Report

Report *RP0360*
Version *2.1*
Instance *PRD01*
Run by *CRUICKH*
Report Date *07/23/2004 11:29*
Total Pages *5*

Selection Criteria -

Container Number *BN10008789*
Site Id %
Waste Stream %
Data Status Code %

Waste Container Data Report

WIPP Waste
Information System

Waste Isolation Pilot Plant

Page 2 of 5

Container Number : BN10008789
Site ID : BN - AMWTP @ INEEL
Site Address : 765 LINDSAY BLVD IDAHO FALLS, ID 83402
Site EPA ID : ID4890008952
Technical Contact : ERIC SCHWEINSBERG
Data Status Code : Shipment has been received at WIPP
Waste Stream Profile : BNINW218
Container Type : 3 - TEN DRUM OVERPACK (TDOP)

Waste Container Information

WAC Ex. # :		Handling Code :	CH
WAC Rev # :	1	Waste Type:	MTRU
Cert Date :	06/21/2004	Waste Stream BIR ID :	INW218
Cert Site :	BN - AMWTP @ INEEL	Waste Stream MWIR ID :	INW218
Generator Site :	RF - ROCKY FLATS	TRU Alpha Act (Ci) :	2.809E-01
IDC Code :	007	TRU Alpha Act Uncert (Ci) :	7.953E-02
Matrix Code :	S3121	TRU Alpha Act Conc (Ci/g) :	1.572E-07
TRUCON Code :	ID211A	TRU Alpha Act Conc Uncert (Ci/g) :	2.376E-07
Shipping Category :	1001300190	Pu239 Eq Act (PE Ci) :	2.895E-01
PCB Conc (ppm) :	0	Pu239 Fiss Gm Eq (FGE) :	8.850E+00
Decay Heat (watts) :	8.933E-03	Pu239 Fiss Gm Eq Uncert (FGE) :	1.420E+00
Decay Heat Uncert (watts) :	1.792E-03	Layers of Packaging :	0
Closure Date :	06/20/2004	Fill Factor (%) :	35
Vent Date :	06/20/2004	Liner Exists :	Y
Aspiration Method ID :		Liner Hole Size (mm) :	7.62
Gas Gen Rate :	.000E+00	Gross Weight (kg) :	2843.25
Gas Hyd Meth Gen Rate :		Gross Weight Uncert (kg) :	2.42
Gas Gen Comp Date :		Alpha Surf Cont (dpm/100cm2) :	19
Shipment Num :	IN040029	BG Surf Cont (dpm/100cm2) :	199
Packaging Num :	141	BG Dose Rate (mrem/hr) :	.5
Assembly ID :	BN040053	Neut Dose Rate (mrem/hr) :	.05
Container Disposal Date :		Total Dose Rate (mrem/hr) :	.55
Container Status Code :	PRE	PCB Waste :	N
		PCB Mass (kg) :	
		PCB Out of Service Date :	
It can be established through process knowledge that the concentration of flammable VOCs present in the headspace of this container is <= 500ppm:	N	Overpack Cntr Number :	
		Overpack Cntr Type :	

Waste Container Data Report

WIPP Waste
Information System

Waste Isolation Pilot Plant

Page 3 of 5

Container Number : BN10008789
Site ID : BN - AMWTP @ INEEL
Site Address : 765 LINDSAY BLVD IDAHO FALLS, ID 83402
Site EPA ID : ID4890008952
Technical Contact : ERIC SCHWEINSBERG
Data Status Code : Shipment has been received at WIPP
Waste Stream Profile : BNINW218
Container Type : 3 - TEN DRUM OVERPACK (TDOP)

Inner Container Information

Container Number	Container Type
BN10003339	19 - 55 GAL DRUM TO BE OVERPACKED - SOLID/VITRIFIED - DAMAGED
BN10003679	19 - 55 GAL DRUM TO BE OVERPACKED - SOLID/VITRIFIED - DAMAGED
BN10003680	19 - 55 GAL DRUM TO BE OVERPACKED - SOLID/VITRIFIED - DAMAGED
BN10003803	19 - 55 GAL DRUM TO BE OVERPACKED - SOLID/VITRIFIED - DAMAGED
BN10003861	19 - 55 GAL DRUM TO BE OVERPACKED - SOLID/VITRIFIED - DAMAGED
BN10003862	19 - 55 GAL DRUM TO BE OVERPACKED - SOLID/VITRIFIED - DAMAGED
BN10004069	19 - 55 GAL DRUM TO BE OVERPACKED - SOLID/VITRIFIED - DAMAGED
BN10004240	19 - 55 GAL DRUM TO BE OVERPACKED - SOLID/VITRIFIED - DAMAGED

Nuclide Information

Radionuclide	Description	Activity (Ci)	Activity Uncert (Ci)	Mass (g)	Mass Uncert (g)	List
AM-241	AMERICIUM 241	1.700E-02	7.510E-03	4.940E-03	2.190E-03	Y
CS-137	CESIUM 137	1.210E-07	5.520E-08	1.390E-09	6.340E-10	Y
NP-237	NEPTUNIUM 237	1.280E-03	2.350E-03	1.810E+00	3.340E+00	Y
PU-238	PLUTONIUM 238	9.800E-03	3.146E-03	5.725E-04	1.834E-04	Y
PU-239	PLUTONIUM 239	2.047E-01	5.475E-02	3.312E+00	8.835E-01	Y
PU-240	PLUTONIUM 240	4.812E-02	1.310E-02	2.118E-01	5.786E-02	Y
PU-241	PLUTONIUM 241	4.876E-01	1.277E-01	4.695E-03	1.229E-03	Y
PU-242	PLUTONIUM 242	4.878E-06	1.235E-06	1.233E-03	3.114E-04	Y
SR-90	STRONTIUM 90	1.330E-07	1.590E-07	1.010E-09	1.200E-09	Y
U-233	URANIUM 233	.000E+00	.000E+00	.000E+00	.000E+00	
U-234	URANIUM 234	7.874E-05	3.044E-05	1.265E-02	4.890E-03	Y
U-235	URANIUM 235	1.196E-05	2.415E-06	5.535E+00	1.119E+00	Y
U-238	URANIUM 238	7.343E-04	1.946E-04	2.153E+03	5.719E+02	Y

Waste Container Data Report

WIPP Waste
Information System

Waste Isolation Pilot Plant

Page 4 of 5

Container Number : BN10008789
Site ID : BN - AMWTP @ INEEL
Site Address : 765 LINDSAY BLVD IDAHO FALLS, ID 83402
Site EPA ID : ID4890008952
Technical Contact : ERIC SCHWEINSBERG
Data Status Code : Shipment has been received at WIPP
Waste Stream Profile : BNINW218
Container Type : 3 - TEN DRUM OVERPACK (TDOP)

Material Parameters Information

Waste Matl Parm	Description	Weight (kg)
1	IRON BASE METAL ALLOYS	214.08
4	OTHER INORGANIC MATERIALS	326.07
8	PLASTICS	76.24
9	SOLIDIFIED INORGANIC MATERIAL	1,443.29
13	STEEL CONTAINER MATERIALS	783.60

Filter Model Information

Filter Model	Description	Quantity	Install Date
99421	FAIREY 99421	9	06/20/2004

Assay Methods Information

See Assay Methods Information for Inner containers.

Characterization Methods Information

See Characterization Methods Information for Inner containers.

Hazardous Code Information

Haz Code	Description
D006	CADMIUM
D007	CHROMIUM
D008	LEAD
D009	MERCURY
D010	SELENIUM
D011	SILVER
D032	HEXACHLOROBENZENE
F001	SPENT HALOGENATED SOLVENTS
F002	SPENT HALOGENATED SOLVENTS
F005	SPENT NON-HALOGENATED SOLVENTS
F006	WASTEWATER TREATMENT SLUDGE
F007	SPENT CYANIDE PLATING BATH
F009	SPENT STRIPPING SOLUTION

Waste Container Data Report

WIPP Waste
Information System

Waste Isolation Pilot Plant

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Container Number : BN10008789
Site ID : BN - AMWTP @ INEEL
Site Address : 765 LINDSAY BLVD IDAHO FALLS, ID 83402
Site EPA ID : ID4890008952
Technical Contact : ERIC SCHWEINSBERG
Data Status Code : Shipment has been received at WIPP
Waste Stream Profile : BNINW218
Container Type : 3 - TEN DRUM OVERPACK (TDOP)

Sample Information

See Sample Information for Inner containers.

WIPP Waste Information System

Waste Container Data Report

Report *RP0360*
Version *2.1*
Instance *PRD01*
Run by *GRUICKH*
Report Date *07/23/2004 11:31*
Total Pages *5*

Selection Criteria -

Container Number *BN10020916*

Site Id %

Waste Stream %

Data Status Code %

Waste Container Data Report

WIPP Waste
Information System

Waste Isolation Pilot Plant

Page 2 of 5

Container Number : BN10020916
Site ID : BN - AMWTP @ INEEL
Site Address : 765 LINDSAY BLVD IDAHO FALLS, ID 83402
Site EPA ID : ID4890008952
Technical Contact : ERIC SCHWEINSBERG
Data Status Code : Shipment has been received at WIPP
Waste Stream Profile : BNINW218
Container Type : 3 - TEN DRUM OVERPACK (TDOP)

Waste Container Information

WAC Ex. # :		Handling Code :	CH
WAC Rev # :	1	Waste Type:	MTRU
Cert Date :	06/15/2004	Waste Stream BIR ID :	IN-W218
Cert Site :	BN - AMWTP @ INEEL	Waste Stream MWIR ID :	IN-W218
Generator Site :	RF - ROCKY FLATS	TRU Alpha Act (Ci) :	6.520E-01
IDC Code :	007	TRU Alpha Act Uncert (Ci) :	1.144E-01
Matrix Code :	S3121	TRU Alpha Act Conc (Ci/g) :	3.614E-07
TRUCON Code :	ID211A	TRU Alpha Act Conc Uncert (Ci/g) :	4.457E-07
Shipping Category :	1001300190	Pu239 Eq Act (PE Ci) :	6.695E-01
PCB Conc (ppm) :	0	Pu239 Fiss Gm Eq (FGE) :	1.051E+01
Decay Heat (watts) :	2.076E-02	Pu239 Fiss Gm Eq Uncert (FGE) :	1.570E+00
Decay Heat Uncert (watts) :	2.753E-03	Layers of Packaging :	2
Closure Date :	06/12/2004	Fill Factor (%) :	36
Vent Date :	06/12/2004	Liner Exists :	Y
Aspiration Method ID :		Liner Hole Size (mm) :	7.62
Gas Gen Rate :	.000E+00	Gross Weight (kg) :	2874.25
Gas Hyd Meth Gen Rate :		Gross Weight Uncert (kg) :	2.29
Gas Gen Comp Date :		Alpha Surf Cont (dpm/100cm2) :	19
Shipment Num :	IN040029	BG Surf Cont (dpm/100cm2) :	199
Packaging Num :	162	BG Dose Rate (mrem/hr) :	.5
Assembly ID :	BN040042	Neut Dose Rate (mrem/hr) :	.7
Container Disposal Date :		Total Dose Rate (mrem/hr) :	1.2
Container Status Code :	PRE	PCB Waste :	N
		PCB Mass (kg) :	
		PCB Out of Service Date :	
It can be established through process knowledge that the concentration of flammable VOCs present in the headspace of this container is <= 500ppm:	N	Overpack Cntr Number :	
		Overpack Cntr Type :	

Waste Container Data Report

WIPP Waste
Information System

Waste Isolation Pilot Plant

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Container Number : BN10020916
Site ID : BN - AMWTP @ INEEL
Site Address : 765 LINDSAY BLVD IDAHO FALLS, ID 83402
Site EPA ID : ID4890008952
Technical Contact : ERIC SCHWEINSBERG
Data Status Code : Shipment has been received at WIPP
Waste Stream Profile : BNINW218
Container Type : 3 - TEN DRUM OVERPACK (TDOP)

Inner Container Information

Container Number	Container Type
BN10000545	19 - 55 GAL DRUM TO BE OVERPACKED - SOLID/VITRIFIED - DAMAGED
BN10002811	19 - 55 GAL DRUM TO BE OVERPACKED - SOLID/VITRIFIED - DAMAGED
BN10002871	19 - 55 GAL DRUM TO BE OVERPACKED - SOLID/VITRIFIED - DAMAGED
BN10002872	19 - 55 GAL DRUM TO BE OVERPACKED - SOLID/VITRIFIED - DAMAGED
BN10002949	19 - 55 GAL DRUM TO BE OVERPACKED - SOLID/VITRIFIED - DAMAGED
BN10003229	19 - 55 GAL DRUM TO BE OVERPACKED - SOLID/VITRIFIED - DAMAGED
BN10003264	19 - 55 GAL DRUM TO BE OVERPACKED - SOLID/VITRIFIED - DAMAGED
BN10003274	19 - 55 GAL DRUM TO BE OVERPACKED - SOLID/VITRIFIED - DAMAGED
BN10003304	19 - 55 GAL DRUM TO BE OVERPACKED - SOLID/VITRIFIED - DAMAGED

Nuclide Information

Radionuclide	Description	Activity (Ci)	Activity Uncert (Ci)	Mass (g)	Mass Uncert (g)	List
AM-241	AMERICIUM 241	7.590E-02	2.056E-02	2.215E-02	5.981E-03	Y
CS-137	CESIUM 137	2.408E-07	8.201E-08	2.770E-09	9.426E-10	Y
NP-237	NEPTUNIUM 237	2.807E-03	2.496E-03	3.991E+00	3.544E+00	Y
PU-238	PLUTONIUM 238	1.168E-02	3.253E-03	6.827E-04	1.898E-04	Y
PU-239	PLUTONIUM 239	4.625E-01	8.262E-02	7.453E+00	1.332E+00	Y
PU-240	PLUTONIUM 240	9.913E-02	1.792E-02	4.370E-01	7.911E-02	Y
PU-241	PLUTONIUM 241	9.582E-01	1.715E-01	9.225E-03	1.652E-03	Y
PU-242	PLUTONIUM 242	9.965E-06	1.865E-06	2.518E-03	4.716E-04	Y
SR-90	STRONTIUM 90	2.656E-07	2.577E-07	2.008E-09	1.949E-09	Y
U-233	URANIUM 233	.000E+00	.000E+00	.000E+00	.000E+00	
U-234	URANIUM 234	4.984E-05	2.731E-05	8.018E-03	4.387E-03	Y
U-235	URANIUM 235	6.350E-06	1.830E-06	2.934E+00	8.477E-01	Y
U-238	URANIUM 238	4.930E-04	1.830E-04	1.450E+03	5.390E+02	Y

Waste Container Data Report

WIPP Waste
Information System

Waste Isolation Pilot Plant

Page 4 of 5

Container Number : BN10020916
Site ID : BN - AMWTP @ INEEL
Site Address : 765 LINDSAY BLVD IDAHO FALLS, ID 83402
Site EPA ID : ID4890008952
Technical Contact : ERIC SCHWEINSBERG
Data Status Code : Shipment has been received at WIPP
Waste Stream Profile : BNINW218
Container Type : 3 - TEN DRUM OVERPACK (TDOP)

Material Parameters Information

Waste Matl Parm	Description	Weight (kg)
1	IRON BASE METAL ALLOYS	240.84
4	OTHER INORGANIC MATERIALS	96.83
8	PLASTICS	81.68
9	SOLIDIFIED INORGANIC MATERIAL	1,700.31
13	STEEL CONTAINER MATERIALS	754.60

Filter Model Information

Filter Model	Description	Quantity	Install Date
99421	FAIREY 99421	9	06/12/2004

Assay Methods Information

See Assay Methods Information for Inner containers.

Characterization Methods Information

See Characterization Methods Information for Inner containers.

Hazardous Code Information

Haz Code	Description
D006	CADMIUM
D007	CHROMIUM
D008	LEAD
D009	MERCURY
D010	SELENIUM
D011	SILVER
D032	HEXACHLOROBENZENE
F001	SPENT HALOGENATED SOLVENTS
F002	SPENT HALOGENATED SOLVENTS
F005	SPENT NON-HALOGENATED SOLVENTS
F006	WASTEWATER TREATMENT SLUDGE
F007	SPENT CYANIDE PLATING BATH
F009	SPENT STRIPPING SOLUTION

Waste Container Data Report

WIPP Waste
Information System

Waste Isolation Pilot Plant

Page 5 of 5

Container Number : BN10020916
Site ID : BN - AMWTP @ INEEL
Site Address : 765 LINDSAY BLVD IDAHO FALLS, ID 83402
Site EPA ID : ID4890008952
Technical Contact : ERIC SCHWEINSBERG
Data Status Code : Shipment has been received at WIPP
Waste Stream Profile : BNINW218
Container Type : 3 - TEN DRUM OVERPACK (TDOP)

Sample Information

See Sample Information for Inner containers.

United States Government

Department of Energy

memorandum

Carlsbad Field Office
Carlsbad, New Mexico 88221

DATE: July 19, 2004

REPLY TO
ATTN OF: CBFO:QA:MPN:GS:04-1566:UFC 2300.00

SUBJECT: Issuance of Corrective Action Report 04-033

TO: Brian Edgerton, DOE-ID

The Carlsbad Field Office (CBFO) has determined that AMWTP has misidentified the populations available for homogeneous solid sampling for waste streams BNINW216 and BNINW218. As a result of this condition adverse to quality, Corrective Action Report (CAR) 04-033 has been issued and is attached. Please note that this CAR has been classified as an accelerated CAR and must be closed by the required correction action completion date listed in block 14.

Associated with this CAR, CBFO has imposed a work suspension. The scope of the work suspension is as follows:

- Shipments of waste streams BNINW216 and BNINW218 to the Waste Isolation Pilot Plant are suspended until further notice.
- Entry of data for these waste streams into the WIPP Waste Information System shall be suspended until further notice.

Please document on the attached CAR continuation sheets your proposed corrective actions and a schedule for completion and forward to me prior to the response due date identified in CAR block 14. Also attached are the instructions for providing corrective action responses for your use in preparing the required responses.

If you have any questions or comments, please contact me at (505) 234-7483.



Martin P. Navarrete
Quality Assurance Specialist

Attachment(s)

Brain Edgerton

-2-

July 19, 2004

cc: w/attachments

A. Holland, CBFO *ED

K. Watson, CBFO *ED

R. Knerr, CBFO *ED

E. Schweinsberg, BNFL *ED

A. Dobson, BNFL *ED

J. Wells, DOE-ID *ED

E. Dumas, BNFL *ED

M. Eagle, EPA *ED

E. Feltcorn, EPA *ED

R. Joglekar, EPA *ED

S. Zappe, NMED *ED

S. Holmes, NMED *ED

D. Winter, DNFSB *ED

J. May, CTAC *ED

A. Pangle, CTAC *ED

WIPP Operating Record, MS 486-06

CBFO QA File

CBFO M&RC

CORRECTIVE ACTION REPORT

1. CAR No.: 04-033	2. Activity Report No.: NA	3. Page <u>1</u> of <u>4</u>
4. Controlling Document: HWFP WAP		5. CBFO Assessment Team Leader: Kerry Watson
6. Responsible Organization: : Advanced Mixed Waste Treatment Project (AMWTP)		7. CAQ Was Discussed With: <div style="display: flex; justify-content: space-between;"> <div>E. Schweinsberg (BNFL)</div> <div>A. Holland (CBFO)</div> </div> <div style="display: flex; justify-content: space-between;"> <div>E. Dumas (BNFL)</div> <div>J. Wells (DOE-ID)</div> </div> <div style="display: flex; justify-content: space-between;"> <div>D. Swale (BNFL)</div> <div>R. Knerr (CBFO)</div> </div>
8. Requirement that was violated: See Continuation Sheet		
9. Condition Adverse to Quality: See Continuation Sheet		
10. Suggested Actions (Optional): See Continuation Sheet		
11a. Significant CAQ (Yes or No): 11b. Work Suspension Recommended (Yes or No): 11c. RCRA-Related (Yes or No): 11d. Accelerated Corrective Action Required (Yes or No):		
12. Types of Actions: Remedial: <u>X</u> Investigative: <u>X</u> Root Cause: <u>X</u> Actions to Preclude Recurrence: <u>X</u>		
13. CAR Initiator: <u>Kerry Watson/</u> Date: <u>7/19/04</u>		
14. Response Due Date: <u>7/26/04</u> Corrective Action Plan Required: <u>YES</u> NO Required Corrective Action Completion Date: <u>8/18/04</u>		
15. a. Concurrence: <u>K. Watson</u> <u>[Signature]</u> For <u>K. Watson</u> b. <u>K. Watson</u> <u>[Signature]</u> For <u>K. Watson</u> Assessment Team Leader Date <u>7/19/04</u> Responsible Assistant Manager Date <u>7/19/04</u> c. <u>A. Holland</u> <u>[Signature]</u> <u>411</u> <u>ALHolland</u> <u>7-22-04</u> Quality Assurance Manager Date		
16. Corrective Actions Proposed by the Responsible Organization: Use CAR Continuation Sheet		
17. Acceptance of Proposed Corrective Actions: Assessment Team Leader _____ Date _____		
18. Verification of Corrective Action Completion: (Use CAR Continuation Sheet)		
19a. Verified By: _____ <div style="display: flex; justify-content: space-between;"> <div>Name</div> <div>Date</div> </div> 19b. Trend Cause Code: _____		
20. Closure: _____ <div style="display: flex; justify-content: space-between;"> <div>Quality Assurance Manager</div> <div>Date</div> </div>		

CBO CORRECTIVE ACTION REPORT

(continuation sheet)

1. CAR No.: 04-033

2. Activity No.: N/A

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Block #8 Requirement that was violated:

B-1a Waste Stream Identification (Excerpt)

"All of the waste within a waste stream may not be available for sampling and analysis at one time. In these instances, generator/storage sites may divide waste streams into waste stream lots based on staging, transportation, or handling issues. Characterization activities shall then be undertaken on a waste stream lot basis."

B-3a(2) Homogeneous Waste Sampling and Analysis (Excerpt)

"The waste containers for sampling and analysis are to be selected randomly from the population of containers for the waste stream."

B2-2a Statistical Selection of Containers for Totals Analysis (Excerpts)

"The Permittees shall require each site project manager to verify that the samples collected from within a waste stream were selected randomly."

NMED Approval of the Advanced Mixed Waste Treatment Project Final Audit Report, Audit A-03-05 (December 23, 2003) (Excerpt)

"However, this approval is limited to only those waste containers remaining from the first lot of the original 3100 m³ sampling "pool" described in the December 12, 2003 Response to Observer Inquiry letter and documented in Waste Stream Profile Number INW216.001...."

Based on this stipulation, CBFO issued CBFO Certification Letter CBFO:NTP:KWW:VW:04-1061, Dated March 9, 2003, which states in part:

"Based on the results of Audit A-03-05, the CBFO is granting authority for characterization, certification and transportation of homogeneous solids waste (S3000). For the first and second stage sludge TRU waste stream, this authority is limited as follows:

- 1. Preliminary solids sampling and analysis data collected by INEEL during the 3100 m³ project may be used for containers identified to be within lot one...."*

Block #9 Condition Adverse to Quality:

Approval of Waste Stream Profile BNINW216 (First and Second Stage Sludges) and Waste Stream Profile BNINW218 (Building 374 Sludges) by CBFO was based on BNFL's statement that the remaining inventory of containers in retrievable storage were part of the original population that was randomly sampled by the INEEL 3100 m³ project. Review of the 3100 m³ project's waste stream profiles and sampling plans (EDF-909) indicated that there were 6751 First and Second Stage Sludge drums available for sampling and 6,083 55 gallon drums of Building 374 Sludges available for sampling.

The total number of containers certified by the 3100 m³ project and shipped to the WIPP plus the total number of containers BNFL has stated remains in the population for both waste streams exceeds the number of containers available for random sampling for both waste streams. If these additional containers were not in the population available for sampling, then the sampling of the containers BNFL has identified as being in the waste stream would not have been random. This is because each container would not have an equal probability of being sampled.

This indicates that BNFL had not identified the original population available for sampling, thereby misidentifying the population available for sampling for both waste streams. In this case, the requirements for random sampling as specified in the Permit have not been met.

Scope of the Work Suspension.

CBFO has suspended further shipments of waste streams INW216 and INW218 until further notice. BNFL shall also cease entry of data into WWIS for these waste streams until further notice.

Block #10 Suggested Actions (Optional):

BNFL should, at a minimum, perform the following:

1. Locate and place into configuration control the list of 6751 drums originally part of the 3100 m³ project's for First and Second Stage Sludges (WSP INW216) and the list of 6083 drums originally part of the 3100 m³ project's for Building 374 Sludges (WSP INW218). A copy of this list must be provided to the CBFO.
2. Provide documented evidence to the CBFO of the traceability of these lists to the original sampling populations and efforts.
3. Physically or administratively segregate the actual BNINW216 and BNINW218 containers that were not available for sampling from the remaining containers within those waste streams.
4. Determine if this condition adverse to quality applies to any other waste streams or waste stream lots.
5. Determine the impact of this condition adverse to quality on waste containers that have been shipped to WIPP.
6. Provide CBFO verification from the Site Project Manager that the samples for the waste streams or waste stream lots were selected randomly based on information obtained during investigation of this condition adverse to quality.
7. Implement an effective formal system of controls to ensure that drums only from approved lots can be made available for shipment.

INSTRUCTIONS FOR PROVIDING CORRECTIVE ACTION RESPONSE

WASTE ISOLATION PILOT PLANT
U.S. DEPARTMENT OF ENERGY
Carlsbad Field Office

CAR NO: 04-033
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INSTRUCTIONS FOR COMPLETING A CORRECTIVE ACTION RESPONSE TO A CAR ADDRESSING A CONDITION ADVERSE TO QUALITY

You are requested to provide a corrective action in response to this corrective action report (CAR) by the due date identified in block 14 of the CAR. If this date cannot be met, provide a written request for extension to the assessment team leader (block 5). This request must include justification for the delay and must be provided prior to the due date.

The response shall address the corrective actions indicated in block 12. As appropriate, develop the response in accordance with the following sequence and format:

In order to develop the CAR response, perform an investigative action to determine the extent and impact of the deficiency and to identify the root cause. Next, determine the actions required to correct the adverse condition.

The response shall include the following information, as appropriate to block 12.

1. Corrective action response for CAR # 04-033
 - A. **Remedial Action**-Describe actions required or taken to correct the specific conditions noted and any similar conditions identified during the investigations.
 - B. **Extent and Impact of the Deficiency**-Describe the investigative actions performed to determine the extent and impact of the condition and the results. This will include a determination of the acceptability of any data generated prior to resolution of the deficiency.
 - C. **Root Cause Determination**-Identify the root cause of the condition as determined through investigative action.
 - D. **Corrective Action to Preclude Recurrence**-Identify the actions required to address the root cause of the condition in order to preclude recurrence.
2. For each action above, identify the individual assigned responsibility for completion of the action and the anticipated (or actual, if complete) completion date.
3. The response must identify the individual having the overall responsibility for completion of the corrective actions.